PAGE 30458 * RCVD AT 21412005 4:57:54 AM [Eastern Standard Time] * SVR: USPTO-EFXRF-110 * DNIS:8729306 * CSID:23698454 * DURATION (mm-55):22-10

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Customer No: 31561

Docket No.: 14217-US-PA-X

Application No.: 10/710,818

ABSTRACT OF THE DISCLOSURE

An electrostatic discharge (ESD) protection device including an ESD protection circuit is provided. The ESD protection circuit includes at least a diode connected in series between a first voltage and a pad, and at least an ESD component connected in series between a second voltage and a pad. Each of the at least an ESD component comprises a deep N-well region formed in a P-type substrate, a triple P-well formed in the deep N-well region, and a highly doped N-type (N+) region and a highly doped P-type (P+) region formed in the triple P-well region.

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PAGE 5258 * RCVD AT 21412005 4:57:54 AM [Eastern Standard Time] * SVR: USPTO-EFXRF-110 * DNIS:8729306 * CSID:23698454 * DURATION (mm-ss):22-10

Marked Version

Customer No.: 31561 Docket No.: 14217-US-PA-X Application No.: 10/710,818

ABSTRACT OF THE DISCLOSURE

An electrostatic discharge (ESD) protection device including an ESD clamp circuitESD protection circuit is provided. The ESD clamp circuitESD protection circuit includes at least a diode connected in series between a first voltage and a pad, and at least an ESD component connected in series between a second voltage and a pad. Each of the at least an ESD component comprises a deep N-well region formed in a P-type substrate, a triple P-well formed in the deep N-well region, and a highly doped N-type (N+) region and a highly doped P-type (P+) region formed in the triple P-well region.